

Work Order ID 66239

February 8, 2011 8:43:49 AM



Page 1

Item ID: D3531-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Front Plate

Start Date: 2/08/11 Start Qty: 4.00



Cust Item ID:

Required Date: 2/22/11 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: CL Date: 11/02/08 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3531	Rev A

100 0.00



FLOW WATER JET

Waterjet Memo 0.00

FLOW CNC Waterjet 1-Cut as per Dwg D3531

6061 - 040 Dwg Rev: A
Prog Rev: A
2-Deburr if necessary

B11-2-16

(9)

110 0.00



QC2- Inspect parts off machine FAI/FAIB

QC Memo 0.00

Quality Control

B11-2-16

120 0.00



QC8- Inspect parts - second check

QC Memo 0.00

Quality Control

8/10/2/16

(89)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 66239

February 8, 2011 8:43:49 AM



Page 2

Item ID: D3531-3

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Item Name: Bracket Front Plate

Start Date: 2/08/11 Start Qty: 4.00



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Required Date: 2/22/11 Req'd Qty: 4.00



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Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00



Small Fab

Small Fab

Memo

Deburr if necessary.

0.00

Small Fab

140

0.00



NC BRAKE

Brake NC

Memo

Bend as per Dwg D3530

0.00

11/02/23

Brake NC

150

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

8/11/02/23

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

February 8, 2011 8:43:49 AM

Accept

[illegible]**Setup Start**

[REDACTED]

Stop

Cust Item ID:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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[illegible]

Customer:

Reference:

Run Start

[illegible]

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

1000

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

**Insp.
Stamp**

[illegible]

0.00

Hand Finishing

0.00

1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

Memo

0.00

Quality Control

0.00

1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

Memo

0.00

Packaging

9 p 41 11/02/23

9 BR 11-2-23

25/02/23 (9)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 66239

February 8, 2011 8:43:49 AM



Page 4

Item ID: D3531-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Front Plate

Start Date: 2/08/11 Start Qty: 4.00



Cust Item ID:

Required Date: 2/22/11 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

w/02/23 LG
ME

11-02-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 8, 2011 8:43:48 AM

Page 1

Work Order ID: 66239



Parent Item: D3531-3



Parent Item Name: Bracket Front Plate

Start Date: 2/08/11

Required Date: 2/22/11

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07-09-24 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.040 Purchased

No

100

sf

50.3300

0.1313

0.552842

1.2



B11-2-14

6061-T6 .040 Sheet

Location

Loc Qty

Loc Code

MAT21

50.33

111224

0.4

113004

49.93

113004

9

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	66239
Description: Bracket Front Plate		Part Number:	D3531-3
Inspection Dwg: D3531	Rev: A	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

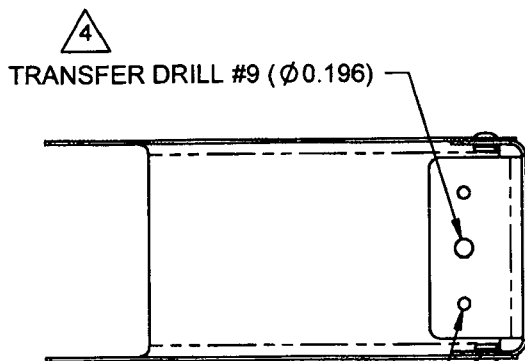
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	0.130	✓		V HB62	
3.72	+/-0.030	3.747	✓		V	
0.37	+/-0.030	0.379	✓		V	
2.840	+/-0.010	2.837	✓		V	
0.88	+/-0.030	0.888	✓		V	
3.50	+/-0.030	3.497	✓		V	
4.67	+/-0.030	4.672	✓		V	

Measured by: B	Audited by: S	Prototype Approval:	N/A
Date: 11-2-16	Date: 11/02/16	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.10.15	New Issue	KJ/EC/DD	[Signature]

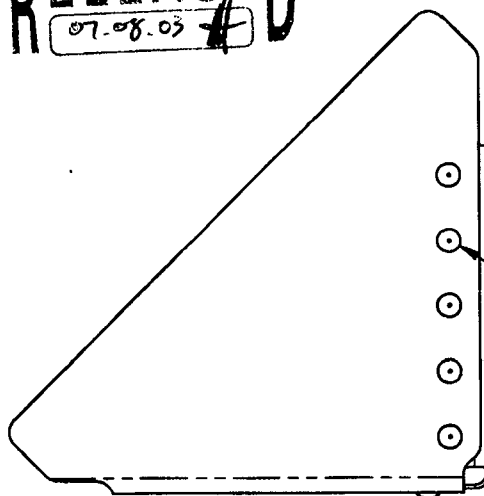


DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED HA	DRAWING NO. D3531	REV. A SHEET 1 OF 3
DATE 07.06.19	TITLE BRACKET ASSEMBLY		SCALE 1:2
REV A	DATE 07.06.19	DESCRIPTION NEW ISSUE	



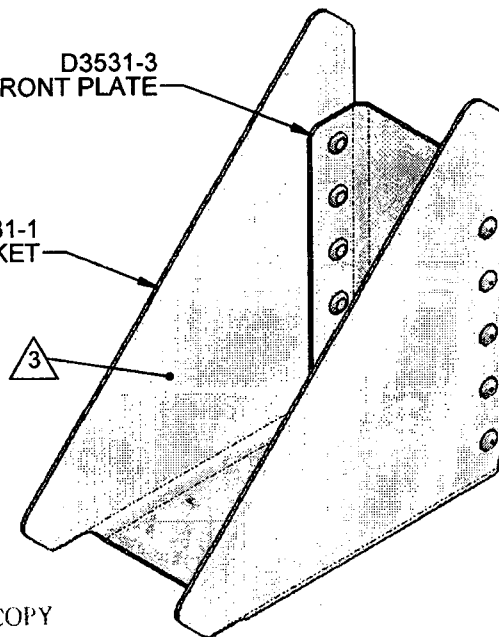
TRANSFER DRILL #30 (Ø0.129)
INSTALL MS20470AD4-4 RIVET
(2 PLACES)

RELEASED
07-08-03



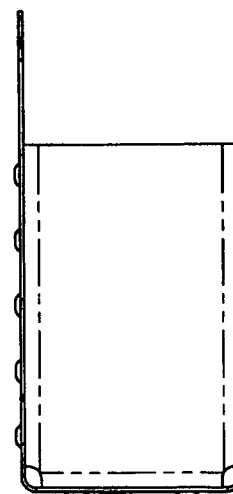
D3531-3
BRACKET FRONT PLATE

D3531-1
BRACKET



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 66239
CZ 1102107

MS20470AD4-4
(10 PLACES)



D3531-041 BRACKET ASSEMBLY

NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY BLACK
SANDTEX (4.3.5.7) PER DART QSI 005 4.3
ALL PARTS
- 2) ASSEMBLE PER DART QSI 003
- 3) IDENTIFY WITH DART P/N "D3531-041" USING
WHITE MARKER ON INSIDE OF BRACKET
ASSEMBLY, WHERE INDICATED
- 4) TRANSFER DRILL HOLES FROM D3531-1 BRACKET
THROUGH D3531-3 BRACKET FRONT PLATE
BEFORE FINISHING

PARTS LIST

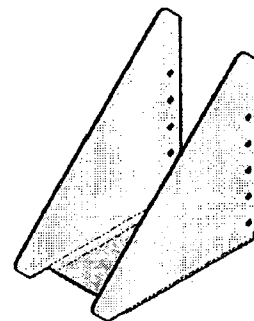
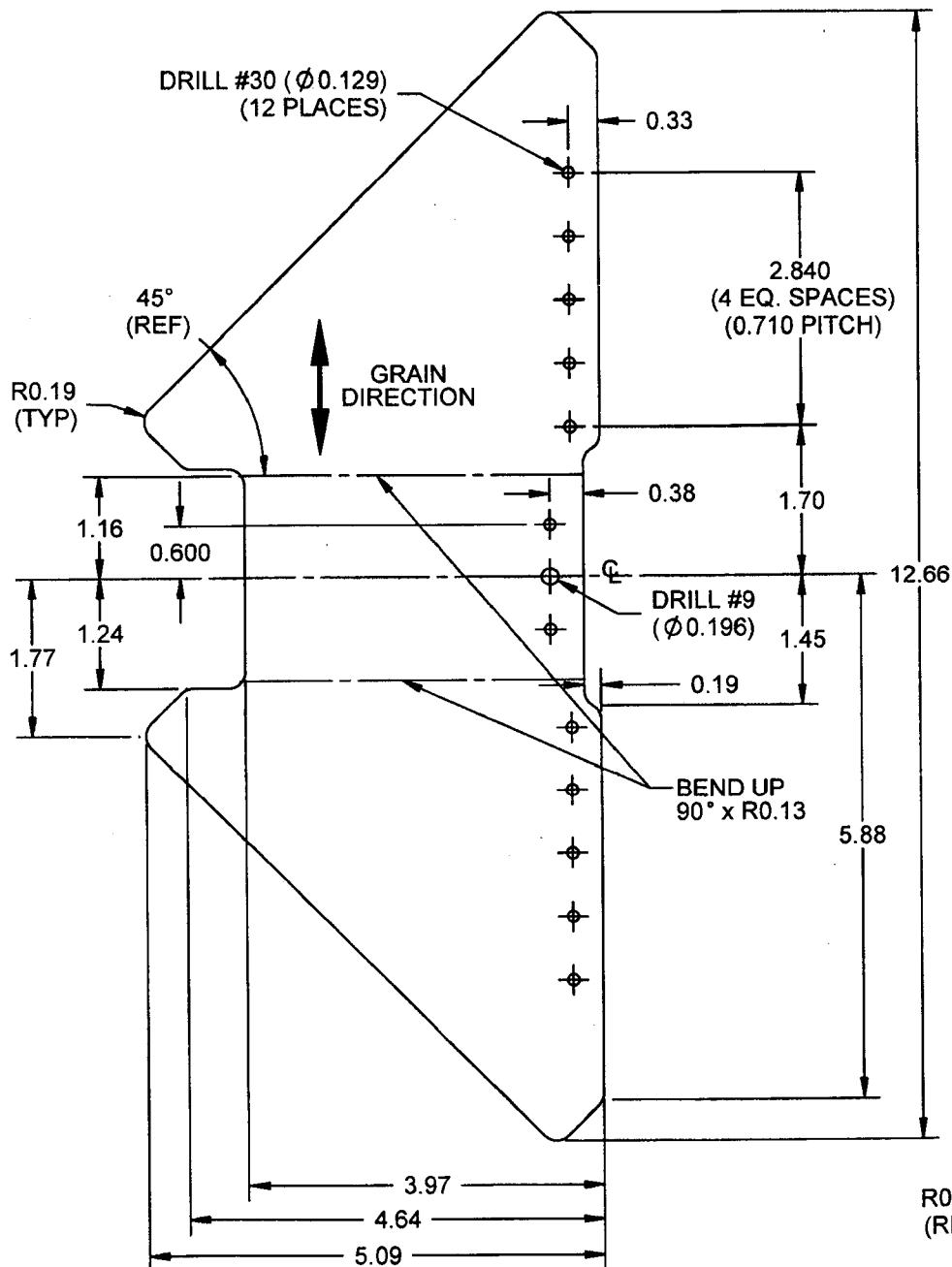
QTY.	P/N	DESCRIPTION
X	D3531-041	BRACKET ASSEMBLY
1	D3531-1	BRACKET
1	D3531-3	BRACKET FRONT PLATE
12	MS20470AD4-4	RIVET

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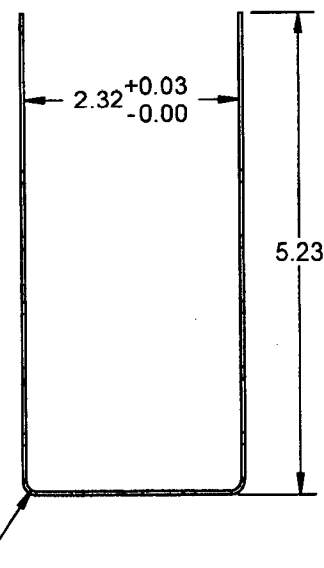
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DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED CE	APPROVED [Signature]	DRAWING NO. D3531
DATE 07.06.19	TITLE BRACKET ASSEMBLY	REV. A SHEET 2 OF 3 SCALE 1:2



RELEASED
07.08.03



D3531-1F FLAT PATTERN

NOTES:

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

D3531-1 BRACKET

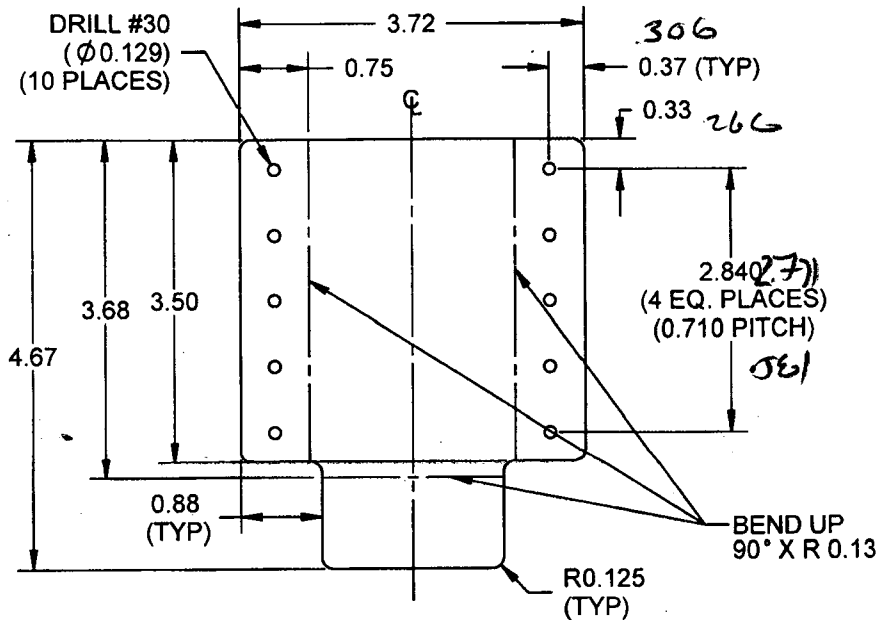
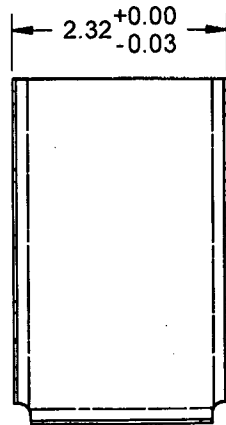
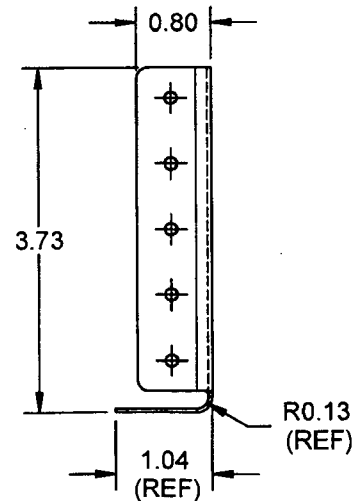
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WORK ORDER
NO. 66239

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DART

DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CE	APPROVED #	DRAWING NO. D3531	REV. A SHEET 3 OF 3
DATE 07.06.19	TITLE BRACKET ASSEMBLY		SCALE 1:2

**D3531-3F FLAT PATTERN****D3531-3 BRACKET FRONT PLATE****NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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